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MEMO

Subject:
IRZ Pilot Test – Baseline Data Evaluation
Former Boeing C6 Facility (Building 2 Area)
Los Angeles, California

Date:
January 16, 2004

From:
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Drafted by:

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Environmental

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ARCADIS G&M (ARCADIS) has prepared this technical memorandum to summarize the analytical results of the *in-situ* reactive zone (IRZ) pilot test at the former Boeing C-6 facility located in Los Angeles, California. The IRZ pilot test is being conducted in accordance with the Workplan[1] and Workplan Addendum[2] for the Building 2 Area. The Workplan and the Workplan Addendum were submitted to and approved by the Los Angeles Regional Water Quality Control Board (RWQCB) on May 17 and November 6, 2002, respectively. The analytical results from baseline groundwater sampling in October 2003 were evaluated and summarized below. A site location map is provided in Figure 1. Amendment and monitoring well locations are provided in Figure 2.

Data Evaluation

The analytical results are included in Tables 1 through 4. A total of ten discrete monitoring wells were sampled from the B-Sand, and six discrete sampling wells from the C-Sand. Specific parameters that are evaluated include volatile organic compounds (VOCs), total organic carbon (TOC), oxidation-reduction potential (ORP), pH, bromide tracer, nitrate, sulfate, and dissolved gases. Also discussed below is the groundwater gradient.

[1] ARCADIS, 2001a. Building 2 In-Situ Reactive Zone Pilot Test Workplan, Boeing Realty Corporation, Former C-6 Facility, Los Angeles, California, August 15.

[2] ARCADIS, 2001b. Addendum to the Building 2 In-Situ Reactive Zone Pilot Test Workplan, Boeing Realty Corporation, Former C-6 Facility, Los Angeles, California, July 31.

B-Sand Results

§ VOCs: The average trichloroethene (TCE) concentrations from wells (IRZMW001A, IRZMW002A, and IRZMW003A) located within the core of the plume (defined as concentrations exceeding 10,000 micrograms per liter [µg/L]) is 12,033 µg/L. The average TCE concentrations from wells located within the core of the plume with screens installed in the Lower B-Sand (IRZMW001B, IRZMW002B, and IRZMW003B) is 2,147 µg/L. TCE concentration from wells (IRZB0081, IRZB0095, IRZMW004, and IRZMW005) located outside the core of the plume (between 5,000 and 10,000 µg/L) is 6,750 µg/L. In general, TCE detected from these monitoring wells are consistent with historic concentrations detected in these areas at the Site.

Degradation product cis-1,2-dichloroethene (cis-1,2-DCE) was detected at three of the ten monitoring wells (IRZMW001B, IRZMW002A, and IRZMW002B). Concentrations of cis-1,2-DCE ranged between 54 and 660 µg/L. Vinyl chloride was not detected at the monitoring wells above the reporting limit.

§ Total Organic Carbon (TOC): The average TOC concentration from the wells monitored is 5.7 milligrams per liter (mg/L). This is consistent with historic concentrations detected at the Site. With the exception of IRZMW002A, the baseline TOC concentrations from specific wells ranged from 2.6 to 5.8 mg/L. The TOC at IRZMW002A is higher at 21.8 mg/L. The target TOC concentration after amendment of carbohydrate solution is between 100 and 500 mg/L in the monitoring wells and 1,000 to 10,000 mg/L in the amendment points.

§ Oxidation Reduction Potential (ORP): The average ORP level from the wells monitored is 129 millivolts (mV). This is consistent with historic levels observed at the Site. With the exception of monitoring well IRZMW002A, baseline ORP values ranged from 40.8 to 280.4 mV. The ORP at IRZMW002A is –140.7 mV. The lower ORP is likely a result of the higher TOC observed at this well. The target ORP level after amendment of carbohydrate solution is less than -150 mV.

§ pH: The average pH from the wells monitored is 6.9. This is consistent with historic levels observed at the Site. The pH from specific wells ranged from 6.68 to 7.13.

§ Bromide Tracer: The average bromide concentration from the wells monitored is 1.3 mg/L. In general, concentrations were below 1.0 mg/L, with the exception of three wells (IRZMW001A, IRZMW002A, and IRZMW003A). These wells are located within the hydraulic test area and the higher concentrations are most likely due to the bromide tracer added during the test. Well IRZMW001A is located approximately 15 feet downgradient of the amendment point used to add the tracer. Bromide concentration from this well prior to the tracer test was 1.7 mg/L (March 5, 2003). After 8 months, the concentration has doubled to 3.6 mg/L (October 30, 2003). This is a good indication that the tracer has traveled approximately 15 feet in 8 months, which is consistent with the estimated groundwater velocity calculated during the hydraulic test[3] (between 17 and 27 feet per year). Well IRZMW002A is located approximately 11 feet downgradient and 3 feet cross gradient of the amendment point used to add the tracer. Bromide concentration detected from this well was 2.3 mg/L. This is a new well and no previous data is available for comparison; however, the result is higher compared to the average bromide concentration. The higher concentration is most likely due to the bromide tracer test and indicates an influence in the downgradient and lateral direction. Well IRZMW003A is located approximately 35 feet downgradient and 15 feet cross gradient of the amendment point. Bromide concentration detected from this well was 1.1 mg/L. This is a new well and no previous data is available for comparison; however, the result is similar to baseline concentration of other wells nearby. Based on the concentration, the bromide tracer has not influenced this downgradient area.

§ Nitrate and Sulfate: The average nitrate and sulfate concentrations are 7.5 and 64 mg/L, respectively. This is generally consistent with historic concentrations detected at the Site. Nitrate concentrations from specific

[3] ARCADIS, 2002. Hydraulic Test Results – Former C-6 Facility. October 24.

wells ranged from 0.13 to 13.6 mg/L. In general, concentrations were greater then 1.0 mg/L, with the exception of well IRZMW002A. Nitrate concentration from this well was 0.13 mg/L. The reduced concentrations may be an indication that nitrate reduction is currently occurring at the well location as a result of the higher TOC level (this well also had an ORP of –140 mV). Sulfate concentrations ranged from 38.6 to 98 mg/L.

§ Dissolved Gases: The average methane, ethane, and ethene concentrations are 2.1, 0.31, and 0.58 µg/L, respectively. Methane concentrations from specific wells ranged from <0.2 to 6.0 µg/L. Ethane concentrations ranged from 0.038 to 1.34 µg/L. Ethene concentrations ranged from 0.023 to 3.25 µg/L. It is important to note that higher methane, ethane, and ethene concentrations were detected from wells IRZMW002A and IRZMW002B. This is likely in part a result of higher TOC levels detected at these well locations.

C-Sand Results

§ VOCs: TCE concentrations from wells located within the treatment area (CMW026 and IRZCMW003) were detected at 1,200 and 2,900 µg/L. Concentrations at these locations are lower than anticipated. The anticipated concentration is at or above 5,000 µg/L.

TCE concentrations in downgradient monitoring wells IRZCMW002, CMW002, and CMW001 were measured at 4,600, 460, and less than 120 µg/L, respectively. Monitoring well IRZCMW002 was placed slightly outside of the anticipated 5,000 µg/L isocontour line for TCE. Groundwater in upgradient monitoring well IRZCMW001 detected TCE at a concentration of 1,300 µg/L. These are new wells and no previous data are available for comparison, however, results from the upgradient and downgradient wells are consistent with historic concentrations detected at the Site. In addition, results from these monitoring wells bound the target remediation area of 5,000 µg/L.

Degradation product cis-1,2-DCE was detected at one of the six monitoring wells (IRZCMW001). Concentration of cis-1,2-DCE was detected at 22 µg/L. Vinyl chloride was not detected at the monitoring wells above the reporting limit.

§ TOC: The average TOC concentration from the wells monitored is 3.7 mg/L. This is consistent with historic concentrations detected at the Site. With the exception of CMW002, the baseline TOC concentrations from specific wells ranged from 2.0 to 3.9 mg/L. The TOC at CMW002 is higher at 8.0 mg/L.

§ ORP: The average ORP level from the wells monitored is 78 mV. This is consistent with historic levels observed at the Site. With the exception of CMW001, the baseline ORP levels from specific wells ranged from 34 to 188 mV. The ORP at CMW001 is lower at –120 mV. The target ORP level after amendment of carbohydrate solution is less than -150 mV.

§ pH: The average pH from the wells monitored is 7.0. This is consistent with historic levels observed at the Site. The pH from specific wells ranged from 6.80 to 7.20.

§ Bromide Tracer: The average bromide concentration from the wells monitored is 0.6 mg/L. This is consistent with historic concentrations detected at the Site. Bromide concentrations from specific wells ranged from 0.24 to 0.97 mg/L.

§ Nitrate and Sulfate: The average nitrate and sulfate concentrations are 3.6 and 51.8 mg/L, respectively. This is consistent with historic concentrations detected at the Site. In general, concentrations of nitrate were greater than 1.0 mg/L, with the exception of well CMW002. The nitrate concentration from this well was below the laboratory reporting limit. The low concentration may be an indication that nitrate reduction is

currently occurring at the well location as a result of the higher TOC level in the groundwater. Sulfate concentrations ranged from 34.2 to 84.9 mg/L.

§ Dissolved Gases: The average methane, ethane, and ethene concentrations are 1.5, 0.61, and 0.94 µg/L, respectively. Methane concentrations from specific wells ranged from 0.3 to 4.8 µg/L. Ethane concentrations from specific wells ranged from 0.11 to 1.54 µg/L. Ethene concentrations ranged from 0.04 to 2.34 µg/L. It is important to note that higher methane, ethane, and ethene concentrations were detected from wells CMW001 and CMW002. This is likely in part a result of higher TOC and lower ORP levels detected at these well locations.

Groundwater Gradient

A groundwater contour map for the B- and C-Sand is illustrated on Figures 3 and 4, respectively. For both zones, groundwater appears to flow to the southeast at a gradient of 0.001. The flow direction and gradient is generally consistent with historic site data. Based on this gradient and the hydraulic conductivities calculated during the hydraulic test, the groundwater velocity for the B-Sand is between 12 and 19 feet per year. This velocity is consistent with the bromide tracer data. No data is currently available for the C-Sand since hydraulic test has not been conducted nor a tracer has been added in the C-Sand. However, using published hydraulic conductivity values[4] between 10^{-4} and 10^{-5} cm/sec for silty sand, gradient of 0.001, and porosity of 31%, the estimated range of velocity is between 3 and 30 feet per year. This velocity will be further evaluated with the bromide tracer.

Recommendations

No recommendation is proposed at this time. The first injection is anticipated to occur in February 2004.

Tables:
1- Field Parameter Results
2- Inorganic Analytical Results
3- Volatile Organic Compound Analytical Results
4- Permanent Gas Analytical Results

Figures:
1- Site Location
2- Amendment Point and Monitoring Well Locations
3- Groundwater Contours for B-Sand – Baseline Sampling Event, October 2003
4- Groundwater Contours for C-Sand – Baseline Sampling Event, October 2003

[4] Groundwater, 1979. Freeze and Cherry.

Tables

Table 1. Field Parameter Results
Former Building 2 Area, Former Boeing C-6 Facility

Well Number	Screened Zone	Well Group	Sample Date	Depth to Water (feet)	pH	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Temperature (°C)	Specific Conductance (mS/cm)	Ferrous Iron (mg/L)	Hydrogen Sulfide (mg/L)
IRZB0081	Zone B	A	10/9/2003	64.53	6.71	5.11	144.4	21.56	1,563	Too Silty	Too Silty
IRZB0095		A	10/7/2003	64.59	7.00	5.62	83.7	23.09	1,435	1.3	0.0
IRZMW001A		A	10/30/2003	68.05	6.68	4.79	245.9	21.85	2,354	0.0	0.0
IRZMW001B		A	10/30/2003	67.98	6.83	6.20	159.6	21.83	1,254	1.0	0.0
IRZMW002A		A	10/30/2003	67.98	6.80	3.14	-140.7	22.06	1,852	2.0	5.0
IRZMW002B		A	10/30/2003	68.07	6.78	4.10	110.3	21.73	1,125	Too Silty	Too Silty
IRZMW005		A	10/9/2003	64.44	7.13	5.33	40.8	21.64	1,591	0.0	0.0
IRZMW003A		B	10/31/2003	68.21	6.77	4.03	210.3	25.67	1,761	Too Silty	Too Silty
IRZMW003B		B	10/31/2003	68.24	6.82	4.98	280.4	23.28	1,154	Too Silty	Too Silty
IRZMW004		C	10/7/2003	64.84	7.00	4.76	152.9	22.52	1,449	0.0	0.0
CMW026	Zone C	A	10/7/2003	63.38	7.15	4.51	34.0	22.31	965	0.0	0.0
IRZCMW003		B	10/7/2003	63.58	7.20	2.73	133.5	22.78	951	0.0	0.0
IRZCMW002		C	10/8/2003	67.78	6.98	2.37	188.5	21.44	888	0.0	0.0
CMW001		C	10/9/2003	66.81	6.80	2.59	-120.00	23.29	948	0.0	0.5
CMW002		C	10/8/2003	65.29	6.91	2.17	51.4	22.95	788	0.0	0.0
IRZCMW001		D	10/8/2003	63.65	7.13	4.22	183.0	21.66	1,219	0.0	0.0
EPA Analytical Method				N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
Group A: wells located within the estimated injection area
Group B: wells located at the estimated edge of the injection area
Group C: wells located downgradient of the treatment area
Group D: wells located upgradient of the treatment area
mg/L - milligrams per liter
mV - millivolts
°C - degrees Celcius
mS/cm - millisiemens per centimeter
NA - Not applicable

Table 2. Inorganic Analytical Results
Former Building 2 Area, Boeing C-6 Facility

Well Number	Screened Zone	Well Group	Sample Date	Bromide (mg/L)	Chloride (mg/l)	Total Iron (mg/L)	Dissolved Manganese (mg/L)	Total Manganese (mg/L)	Nitrate (mg/L)	Nitrite (mg/L)	Sulfate (mg/L)	Total Organic Carbon (mg/L)
IRZB0081	Zone B	A	10/9/2003	0.94	348	25.00	0.05	1.40	8.50	<1.0	43.8	5.8
IRZB0095		A	10/7/2003	0.85	320	3.30	0.05	0.78	7.20	<1.0	38.6	3.0
IRZMW001A		A	10/30/2003	3.6	615	6.8	0.019	0.24 J	13.6	<1.0	88.6	5.0
IRZMW001B		A	10/30/2003	0.73	218	2.9	0.020	0.090 J	5.8	<0.50	98.0	3.8
IRZMW002A		A	10/30/2003	2.3	444	13.4	3.6	3.7 J	0.13	<1.0	77.8	21.8
IRZMW002B		A	10/30/2003	0.94	220	11.7	0.15	0.31 J	6.9	0.21 B	80.9	4.1
IRZMW005		A	10/9/2003	0.97	358	25.00	0.05	1.40	8.50	<1.0	43.8	3.9
IRZMW003A		B	10/31/2003	1.1	465	5.6	0.0069 B	0.11 J	9.6	<1.0	48.3	2.6
IRZMW003B		B	10/31/2003	0.69	240	8.1	0.051	0.23 J	6.3	<0.50	77.9	3.8
IRZMW004		C	10/7/2003	0.89	338	4.80	0.01	0.30	8.10	<1.0	41.2	3.1
CMW026	Zone C	A	10/7/2003	0.55	215	1.70	0.01	0.09	2.80	<1.0	34.2	2.0
IRZCMW003		B	10/7/2003	0.51	191	1.10	0.02	0.16	1.60	<1.0	49.8	2.0
IRZCMW002		C	10/8/2003	0.37	150	0.23	0.10	0.04	2.50	<0.50	62.5	3.2
CMW001		C	10/9/2003	0.97	358	2.50	0.02	0.10	8.60	<1.0	41.6	3.9
CMW002		C	10/8/2003	0.24	110	0.63	0.21	0.13	ND	<0.50	84.9	8.0
IRZCMW001		D	10/8/2003	0.73	275	1.90	0.01	0.04	2.70	<1.0	37.7	3.3
EPA Analytical Method				300.0A	300.0A	6010B	6010A	6010B	300.0A	300.0A	300.0A	9060

Notes:
Group A: wells located within the estimated injection area
Group B: wells located at the estimated edge of the injection area
Group C: wells located downgradient of the treatment area
Group D: wells located upgradient of the treatment area
<1.0 - Not detected above indicated reporting limit
J - Method blank contamination. The method blank contains the target analyte at a reportable level.
B - estimated result less than reporting limit

Table 3. Volatile Organic Compound Analytical Results
Former Building 2 Area, Boeing C-6 Facility

Well Number	Screened Zone	Well Group	Sample Date	Acetone (Πg/L)	Chlorobenzene (Πg/L)	Chloroform (Πg/L)	1,1-DCA (Πg/L)	1,1-DCE (Πg/L)	cis-1,2-DCE (Πg/L)	Methylene Chloride (Πg/L)	Tricloroethene (Πg/L)	Vinyl Chloride (mg/L)
IRZB0081	Zone B	A	10/9/2003	<1,700	<170	**50 J**	<170	**63 J**	<170	<170	**6,500**	<170
IRZB0095		A	10/7/2003	<1,200	<120	**150**	<120	**49 J**	<120	**150**	**5,800**	<120
IRZMW001A		A	10/30/2003	<5,000	<500	<500	<500	<500	<500	<500	**11,000**	<500
IRZMW001B		A	10/30/2003	<1,200	<120	<120	<120	**50 J**	**54 J**	<120	**4,800**	<120
IRZMW002A		A	10/30/2003	<1,200	<120	<120	<120	**63 J**	**660**	<120	**5,100**	<120
IRZMW002B		A	10/30/2003	**73 JB**	<12	<12	<12	**8.5 J**	**80**	<12	**640**	<12
IRZMW005		A	10/9/2003	<1,700	<170	**56 J**	<170	**75 J**	<170	<170	**6,000**	<170
IRZMW003A		B	10/31/2003	**3,200 JB**	<500	<500	<500	**180 J**	<500	<500	**20,000**	<500
IRZMW003B		B	10/31/2003	**130 JB**	<25	<25	<25	**19 J**	<25	<25	**1,000**	<25
IRZMW004		C	10/7/2003	<2,500	<250	**110 J**	<250	**81 J**	<250	<250	**8,700**	<250
CMW026	Zone C	A	10/7/2003	<250	<25	**21 J**	<25	**65**	<25	<25	**1,200**	<25
IRZCMW003		B	10/7/2003	<1,000	<100	**36 J**	<100	**83 J**	<100	**89 J**	**2,900**	<100
IRZCMW002		C	10/8/2003	<1,000	<100	**36 J**	<100	**39 J**	<100	<100	**4,600**	<100
CMW001		C	10/9/2003	<1,200	**7,300**	**60 J**	<120	<120	<120	<120	<120	<120
CMW002		C	10/8/2003	<1,000	**3,600**	<100	<100	<100	<100	<100	**460**	<100
IRZCMW001		D	10/8/2003	**210 J**	<62	**76**	**13 J**	**350**	**22 J**	<62	**1,300**	<62
EPA Analytical Method				8260B	8260B	8260B	8260B	8260B	8260B	8260B	8260B	8260B

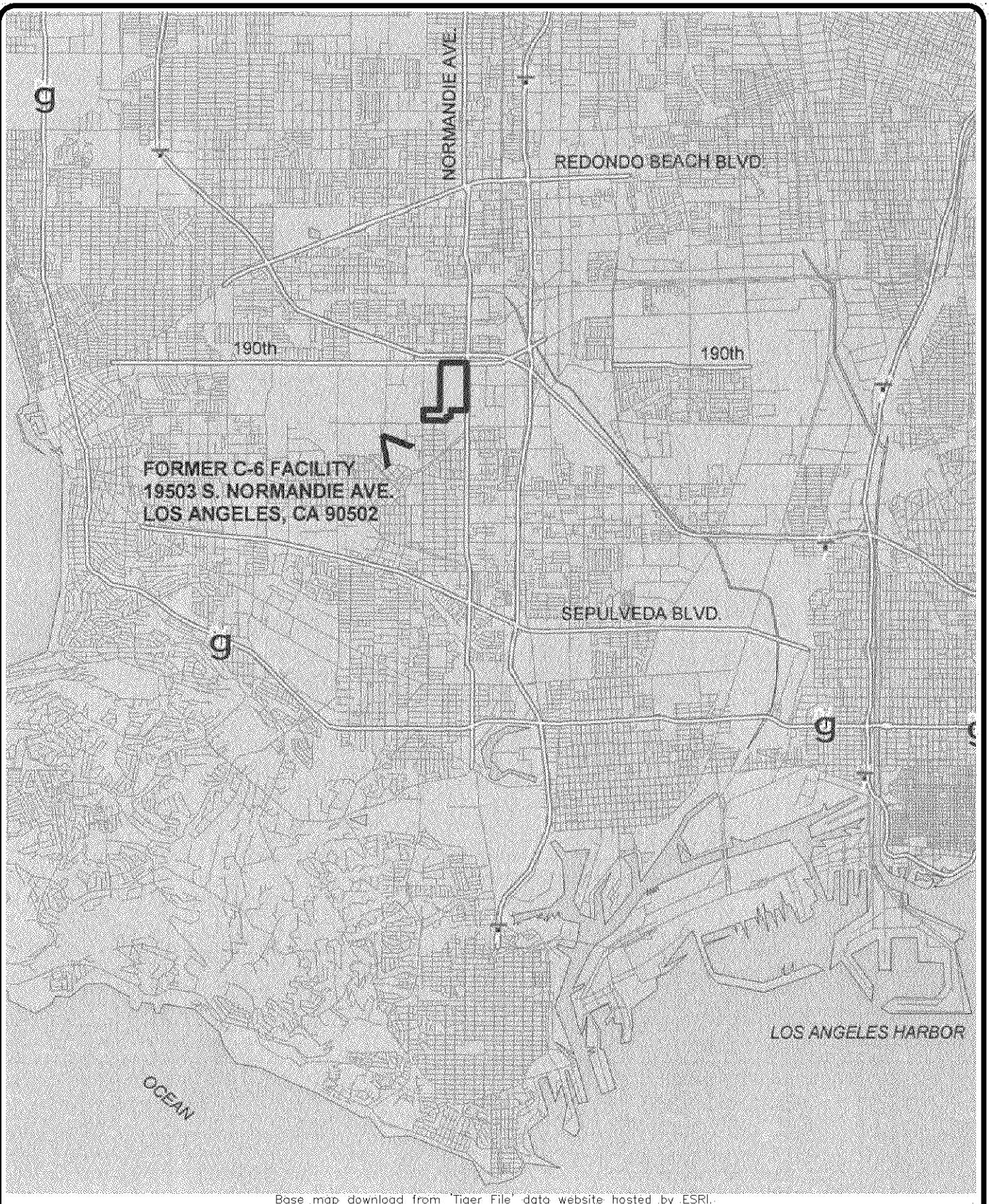
Notes:
Group A: wells located within the estimated injection area
Group B: wells located at the estimated edge of the injection area
Group C: wells located downgradient of the treatment area
Group D: wells located upgradient of the treatment area
DCA - dichloroethane
DCE - dichloroethene
< - not detected above indicated reporting limit
J - estimated result less than reporting limit
JB - acetone detected at 11 Πg/L in trip blank
Πg/L - micrograms per liter

Table 4. Permanent Gas Analytical Results
Former Building 2 Area, Boeing C-6 Facility

Well Number	Screened Zone	Well Group	Sample Date	Dissolved Oxygen (mg/L)	Carbon Dioxide (mg/L)	Nitrogen (mg/L)	Methane (Πg/L)	Ethane (ng/L)	Ethene (ng/L)
IRZB0081	Zone B	A	10/9/2003	3.70	16.9	12.6	<0.2	60	110
IRZB0095		A	10/7/2003	2.67	14.0	8.7	<0.2	50	80
IRZMW001A		A	10/30/2003	1.16	27.4	10.0	2.9	72	51
IRZMW001B		A	10/30/2003	4.05	21.2	12.4	0.4	38	23
IRZMW002A		A	10/30/2003	0.62	39.1	8.7	4.0	1,172	3,250
IRZMW002B		A	10/30/2003	3.38	16.6	16.1	6.0	1,344	2,051
IRZMW005		A	10/9/2003	4.97	16.3	14.0	<0.2	60	70
IRZMW003A		B	10/31/2003	3.06	25.3	15.6	0.5	169	96
IRZMW003B		B	10/31/2003	3.65	18.4	11.5	0.7	87	81
IRZMW004		C	10/7/2003	2.74	15.3	8.4	0.3	50	60
CMW026	Zone C	A	10/7/2003	2.47	6.7	14.8	0.9	520	40
IRZCMW003		B	10/7/2003	1.11	7.1	12.1	1.6	950	880
IRZCMW002		C	10/8/2003	0.94	7.2	15.2	0.6	430	1,210
CMW001		C	10/9/2003	1.74	9.1	13.4	4.8	1,540	2,340
CMW002		C	10/8/2003	2.48	11.4	16.1	0.9	141	1041
IRZCMW001		D	10/8/2003	3.10	13.2	14.9	0.3	110	180
Analytical Method				RSK 175	RSK 175	RSK 175	RSK 175	RSK 175	RSK 175

Notes:
Group A: wells located within the estimated injection area
Group B: wells located at the estimated edge of the injection area
Group C: wells located downgradient of the treatment area
Group D: wells located upgradient of the treatment area
mg/L - milligrams per liter
Πg/L - micrograms per liter
ng/L - nanograms per liter
<0.2 - Not detected above indicated reporting limit

Figures



Base map download from 'Tiger File' data website hosted by ESRI.

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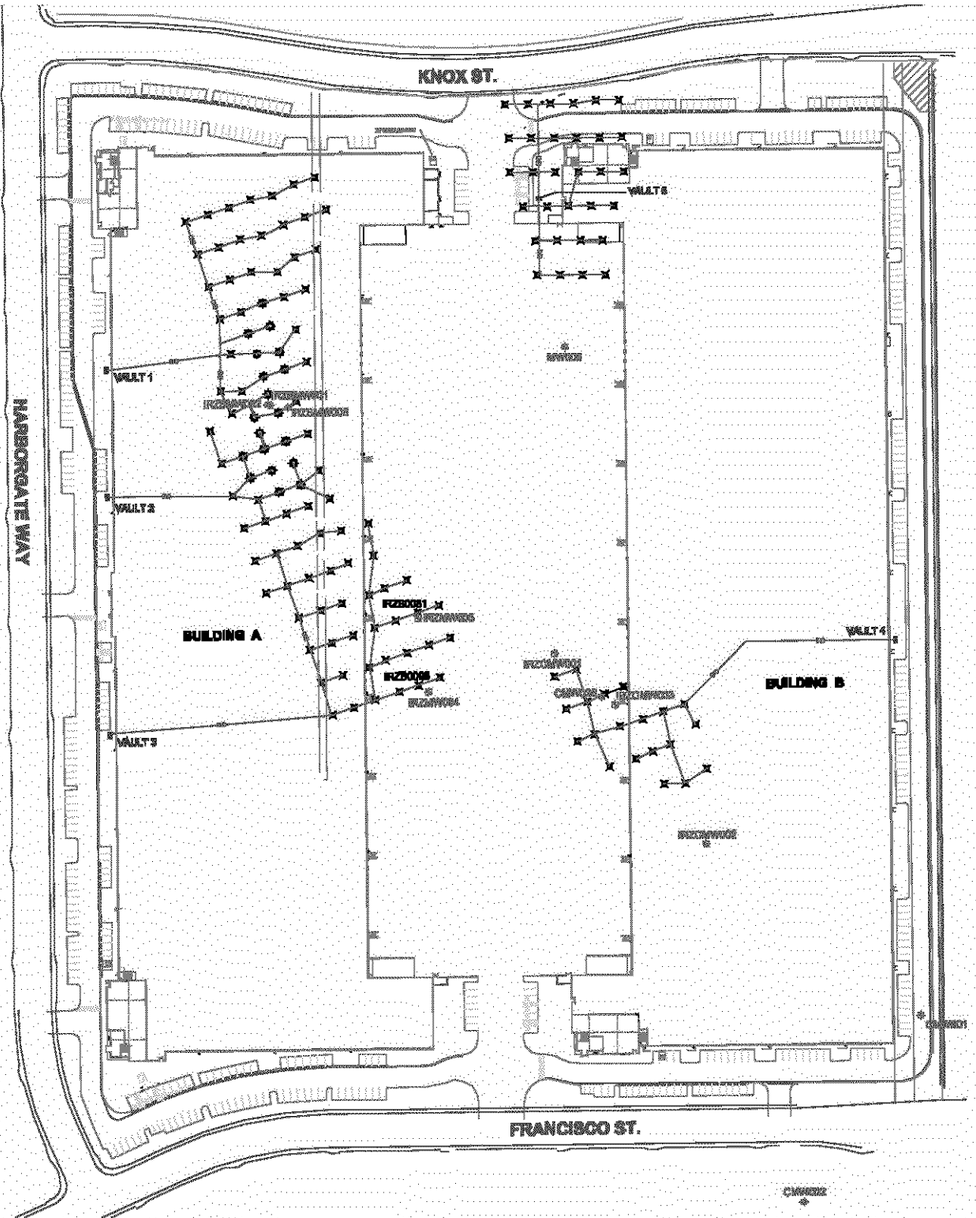
ARCADIS

SITE LOCATION

BOEING REALTY CORPORATION
FORMER C-6 FACILITY
LOS ANGELES, CALIFORNIA

FIGURE

1



LEGEND

- BIOGROUNDWATER MONITORING WELL
- DUAL BIOINJECTION POINT
- SINGLE BIOINJECTION POINT
- VAULT 1 — FLUSH MOUNTED VAULT FOR SUBSURFACE REMEDIATION PIPING
- —BIO— BIOREMEDIATION SYSTEM PIPING

N

0 100 200
SCALE IN FEET

ALL DIMENSIONS AND LOCATIONS APPROXIMATE

BASE MAP PROVIDED BY HILL PINKERT ARCHITECTS, INC. IN FEBRUARY 2003

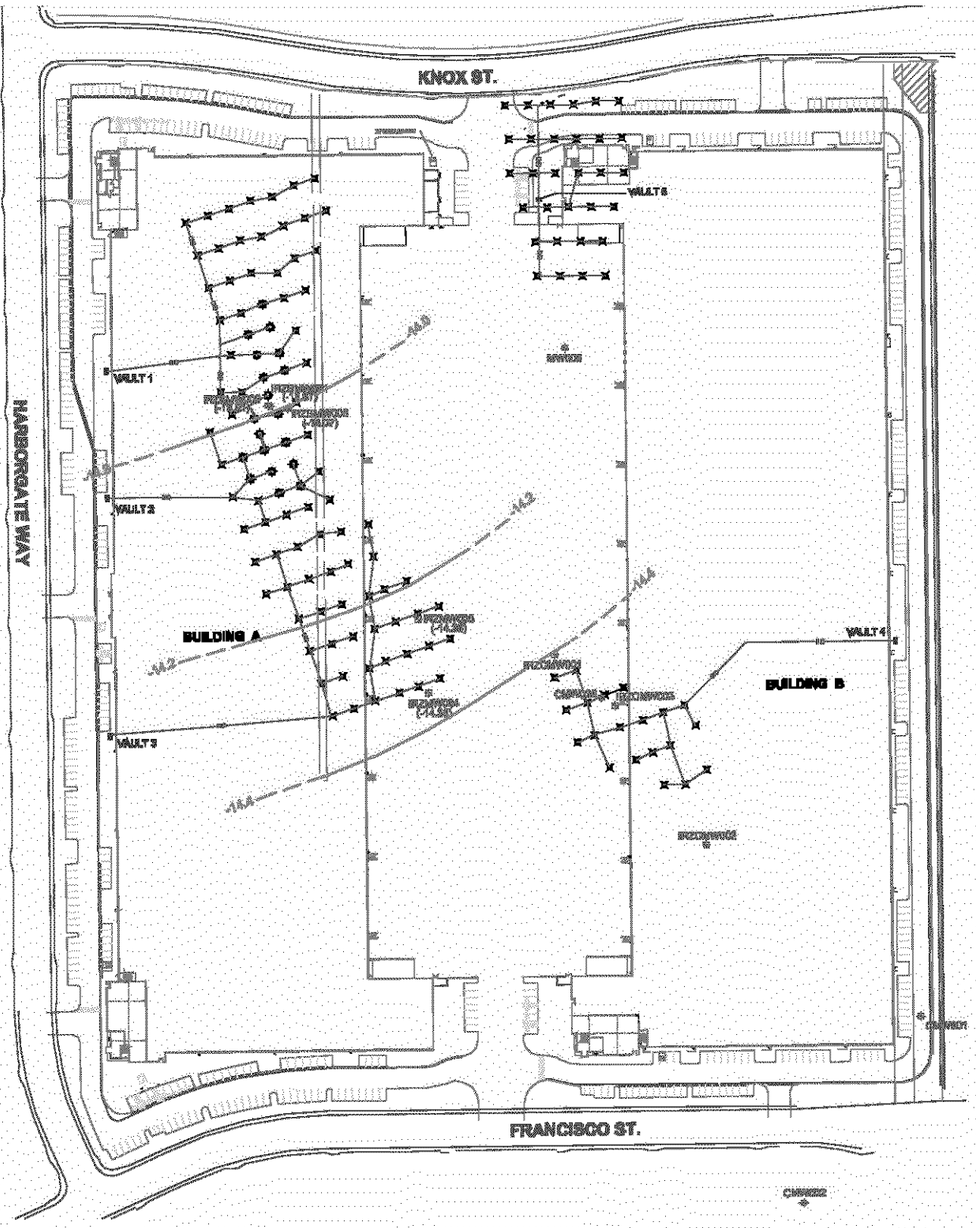
ARCADIS

AMENDMENT POINT AND MONITORING WELL LOCATIONS

BOEING REALTY CORPORATION
FORMER C-6 FACILITY
LOS ANGELES, CALIFORNIA

FIGURE
2

DATE: 1/8/04 | 11:30 | PRJ#: CA 594.03.01 | DWG: G:\drawings\qproject\boeing\2003\Site Map-survey-coords | FILE: | CHK: LOTHMAN | PM: NGUYEN | ART: QUINONES



LEGEND

- BIOGROUNDWATER MONITORING WELL
- LINE OF EQUAL GROUNDWATER ELEVATION IN FEET BELOW MEAN SEA LEVEL
- (-14.28) GROUNDWATER ELEVATION IN FEET BELOW MEAN SEA LEVEL
- DUAL BIOINJECTION POINT
- SINGLE BIOINJECTION POINT
- VAULT 1 FLUSH MOUNTED VAULT FOR SUBSURFACE REMEDIATION PIPING
- —BIO— BIOREMEDIATION SYSTEM PIPING

N

0 100 200
SCALE IN FEET

ALL DIMENSIONS AND LOCATIONS APPROXIMATE

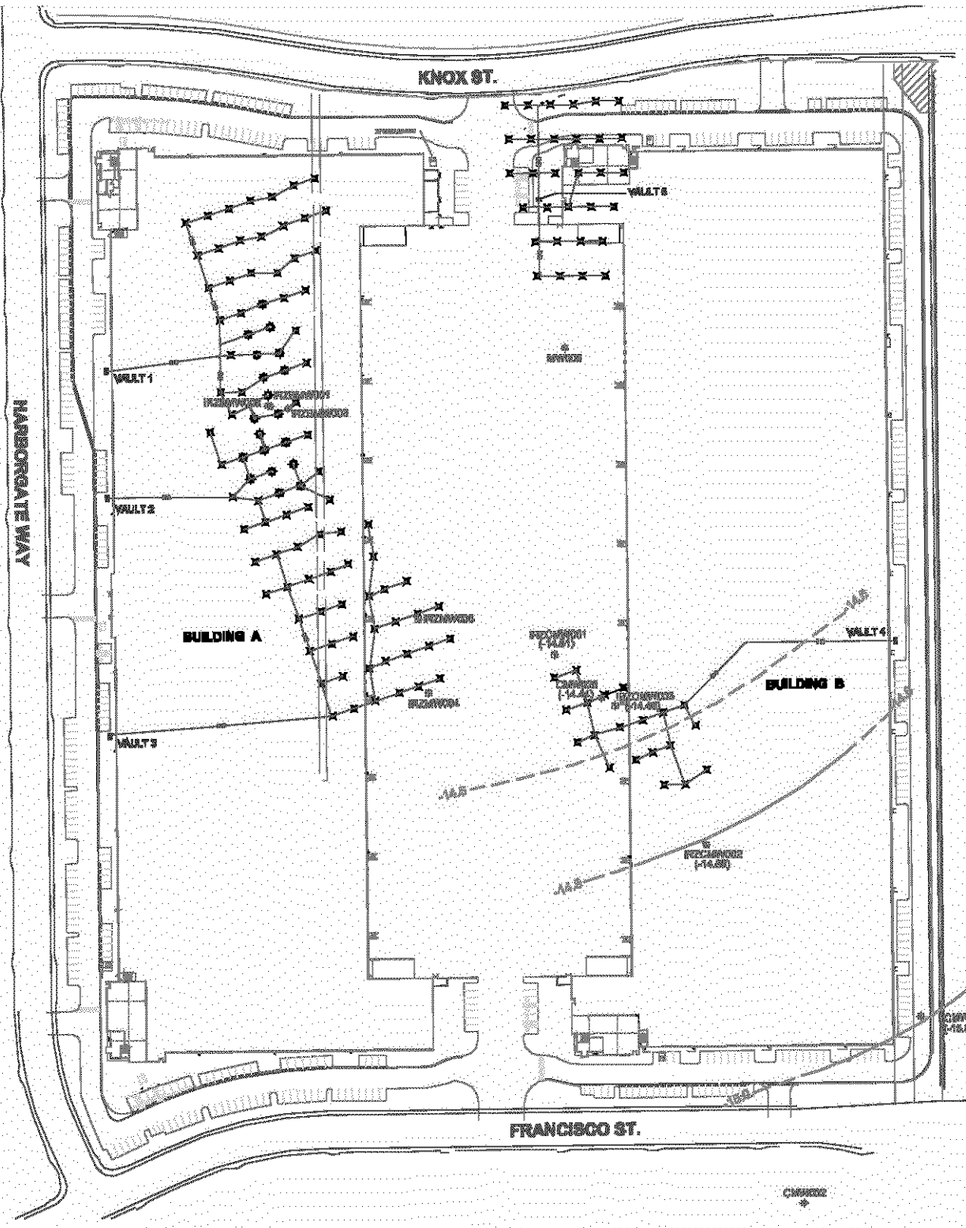
BASE MAP PROVIDED BY HILL PINKERT ARCHITECTS, INC. IN FEBRUARY 2003

ARCADIS

GROUNDWATER CONTOUR MAP FOR ZONE B OCTOBER 2003

BOEING REALTY CORPORATION
FORMER C-6 FACILITY
LOS ANGELES, CALIFORNIA

FIGURE
3



LEGEND

- BIOGROUNDWATER MONITORING WELL
- LINE OF EQUAL GROUNDWATER ELEVATION IN FEET BELOW MEAN SEA LEVEL
- (-XX.XX) GROUNDWATER ELEVATION IN FEET BELOW MEAN SEA LEVEL
- DUAL BIOINJECTION POINT
- SINGLE BIOINJECTION POINT
- VAULT 1 FLUSH MOUNTED VAULT FOR SUBSURFACE REMEDIATION PIPING
- —BIO— BIOREMEDIATION SYSTEM PIPING

- N -

0 100 200
SCALE IN FEET

ALL DIMENSIONS AND LOCATIONS APPROXIMATE

BASE MAP PROVIDED BY HILL PINKERT ARCHITECTS, INC. IN FEBRUARY 2003

ARCADIS

GROUNDWATER CONTOUR MAP FOR ZONE C
OCTOBER 2003

BOEING REALTY CORPORATION
FORMER C-6 FACILITY
LOS ANGELES, CALIFORNIA

FIGURE
4

DATE: 1/8/04 | 11:30 | PRJ#: CA 594.03.05 | DWG: G:\drawings\project\boeing\2003\GE-1003-ZONEC | FILE: | CHK: LOTHMAN | PM: NGUYEN | ART: QUINONES